

**REMARKS**

The present Amendment is in response to the Office Action mailed June 24, 2004 in the above-identified application. Enclosed herewith is a Petition requesting a three-month extension of time for resetting the deadline for responding to the Office Action from September 24, 2004 to and including December 24, 2004.

In the present Amendment, Applicants have amended claims 1, 3-4 and 6. Claims 2 and 10-17 have been cancelled. The Abstract of the Disclosure has been amended to generally mirror the changes made to claim 1.

The amendment of claim 1 is fully supported by the originally filed specification and introduces no new matter. For example, paragraphs 53 and 56 of the originally filed specification support the new text added to claim 1.

In the Office Action, the Examiner rejected claims 4, 5 and 10-17 under 35 U.S.C. § 112, second paragraph, as being indefinite. In response to the Section 112, second paragraph, rejection, claim 4 has been amended to delete "in the aggregate" therefrom. Thus, claims 4 and 5 are now deemed to satisfy the requirements of 35 U.S.C. § 112, second paragraph, and are otherwise allowable. Claims 10-17 have been canceled, thereby rendering the Section 112 rejection moot.

The Examiner rejected claims 1-5, 7-13 and 15-17 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0010316 to William et al. In response, Applicants respectfully assert that independent claim 1 is unanticipated by William because the reference neither discloses nor suggests an apparatus including first and second members having respective first and second articulation surfaces with "each of the first and second articulation surfaces having a toroidal saddle shaped surface." Claim 1 is also unanticipated because William neither discloses nor suggests an apparatus whereby "the engaging articulation surfaces include opposing constant radius of curvature surfaces that are non-congruent." Claims 3-5 and 7-9 are unanticipated, *inter alia*,

by virtue of their dependence from claim 1, which is unanticipated for the reasons set forth above.

The Examiner rejected claims 1-17 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0024462 to Ferree et al. Independent claim 1 is unanticipated by Ferree because the cited reference neither discloses nor suggests an apparatus including a first member and a second member having opposing toroidal saddle shaped articulation surfaces "wherein the engaging articulation surfaces include opposing constant radius of curvature surfaces that are non-congruent." Claims 3-9 are unanticipated, *inter alia*, by virtue of their dependence from claim 1, which is unanticipated for the reasons set forth above.

The Examiner rejected claims 1-17 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,039,763 to Shelokov. Referring to FIGS. 1A-1C and 2A-2C thereof, Shelokov discloses an artificial disk including a first plate 1 and a second plate 10. Referring to FIGS. 1A-1C, the first plate 1 has a substantially flat superior surface 2 and an opposing articulating inferior surface 3 having two laterally juxtaposed convex portions 4, 5. Referring to FIGS. 2A-2C, the second plate 10 includes a substantially flat inferior surface 11 and an articulating superior surface 12 having two laterally juxtaposed concave portions 13, 14. Referring to FIGS. 3A-3B, as the upper and lower plates 21, 22 articulate along their articulating surfaces 25, 26 the upper plate 21 will move in the direction indicated by the arrow B from the home position depicted in FIG. 3A to a second position depicted in FIG. 3B. In the home position, the plates 21, 22, share a common center of rotation (23a,b). However, when the upper plate 21 is articulated to a second position as depicted in FIG. 3B, the instant centers of rotation 23a, 23b are no longer coincident. Therefore, when a patient using the Shelokov device bends in a forward or backward manner, the instant centers of rotation 23a, 23b will be displaced away from each other in an anteroposterior fashion, i.e., there will be an anteroposterior translation of

the instant centers of rotation 23b with respect to the instant center of rotation 23a.

FIGS. 4A and 4B of Shelokov depict partial cross-sectional rear, or posterior, elevation views of an artificial spinal disc 30 having a first superior plate 31 and a second inferior plate 32. The first superior plate 31 has a bicondylar articulating surface that articulates with a bimodal concave articulating surface 34 of the second plate 32. The plates 31, 32 are depicted in a home or neutral position. However, when the first plate 31 is translated laterally along the arrow T with respect to the second plate 32, the first plate 31 will tilt slightly with respect to the second plate 32 and the instant centers of rotation 35a, 35b will be displaced from one another. Thus, the Shelokov artificial spinal disc provides first and second articulating surfaces that are adapted to provide a changing center of rotation when the articulating surfaces are translated or articulated with respect to one another in a lateral-to-lateral fashion.

Claim 1 is unanticipated by Shelokov because the cited reference neither discloses nor suggests an apparatus including first and second members having respective first and second articulation surfaces with "each of the first and second articulation surfaces having a toroidal saddle shaped surface." Claim 1 is also unanticipated because Shelokov does not disclose first and second members having opposing toroidal saddle shaped articulation surfaces "wherein the engaging articulation surfaces include opposing constant radius of curvature surfaces that are non-congruent." Claims 3-9 are unanticipated, *inter alia*, by virtue of their dependence from claim 1, which is unanticipated for the reasons set forth above.

Applicants have amended the claims in the present application in order to obtain prompt allowance of the case. Applicants respectfully note that they intend to pursue claims in related or continuing applications that are of a broader scope than the claims currently pending in this application.

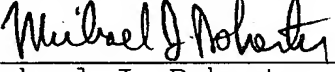
As it is believed that all of the rejections set forth in the Office Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that she telephone Applicants' attorney at (908) 654-5000 in order to overcome any additional objections which she might have.

If there are any additional charges in connection with this requested Amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

Dated: December 20, 2004

Respectfully submitted,

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